Village of Homewood Bicycle Plan

A Work Plan for the Implementation of Near-Term and Long-Term Improvements to the Bicycling Environment

Version. 1.0, May 21, 2007

Executive Summary

The Village of Homewood Bicycle Plan identifies a proposed bicycle network and defines a 10-year program to improve key components of the network that will make bicycling safer, more convenient, and more fun.

The Village's goal is to use the plan to develop a bicycle-friendly environment that encourages its residents to bicycle for transportation, recreation, and good health.

The plan includes: a map of the proposed bicycle network, with routes color-coded by recommended facility; and the 10 year program organized by near-term, mid-term, and long-term priority recommendations:

Near-Term Priorities: 1-2 year timeframe

- Signed bicycle network
- Improved intersections
- Shared lanes and bike lanes on appropriate streets
- Short off-street connecting routes
- Bicycle parking
- Village of Homewood Bicycle Map
- Education and encouragement programs

Mid-Term Priorities: 3-5 year timeframe

- The Quarry Spur Trail connecting Homewood with Glenwood Woods
- Road Diets for Dixie Hwy. and portions of Riegel Rd. and Ridge Rd.
- 183rd St. viaduct improvements
- Bike lane installations on roads requiring reconstruction

Long-Term Priorities: 6-10 year timeframe

- Bicycle/pedestrian tunnel beneath the Canadian National tracks
- Improving/reconstructing 183rd St.

Much of the near-term program can be accomplished through the Village's normal funding mechanisms, including coordination with annual resurfacing and reconstruction programs. Local sponsorship will greatly accelerate the plan's implementation.

Where necessary, each of the plan's recommendations qualify for funding through federal programs, including Congestion Mitigation and Air Quality, the Surface Transportation Program, and Transportation Enhancements [administered through the Illinois Department of Transportation], and the Recreational Trails Program [administered by the Illinois Department of Natural Resources].

The Village of Homewood Bicycle Planning Committee

- Jim Marino - Assistant to the Village Manager, Village of Homewood
- Dennis Bubenik. Finance Director, Village of Homewood
- Beth Barron, Planner, Village of Homewood
- Charlie Martin, Public Works, Village of Homewood
- Jim Gannon, Deputy Chief of Police, Homewood Police Department
- Keith Gorczyca, Facilities Director, Homewood-Flossmoor Park District
- Shirley Watkins, Assistant Principal, Millennium School
- Brent Lane, Resident and bike shop owner

Consultants: Nick Jackson, Director of Planning, Chicagoland Bicycle Federation
Steve Buchtel, Southland Coordinator, Chicagoland Bicycle Federation

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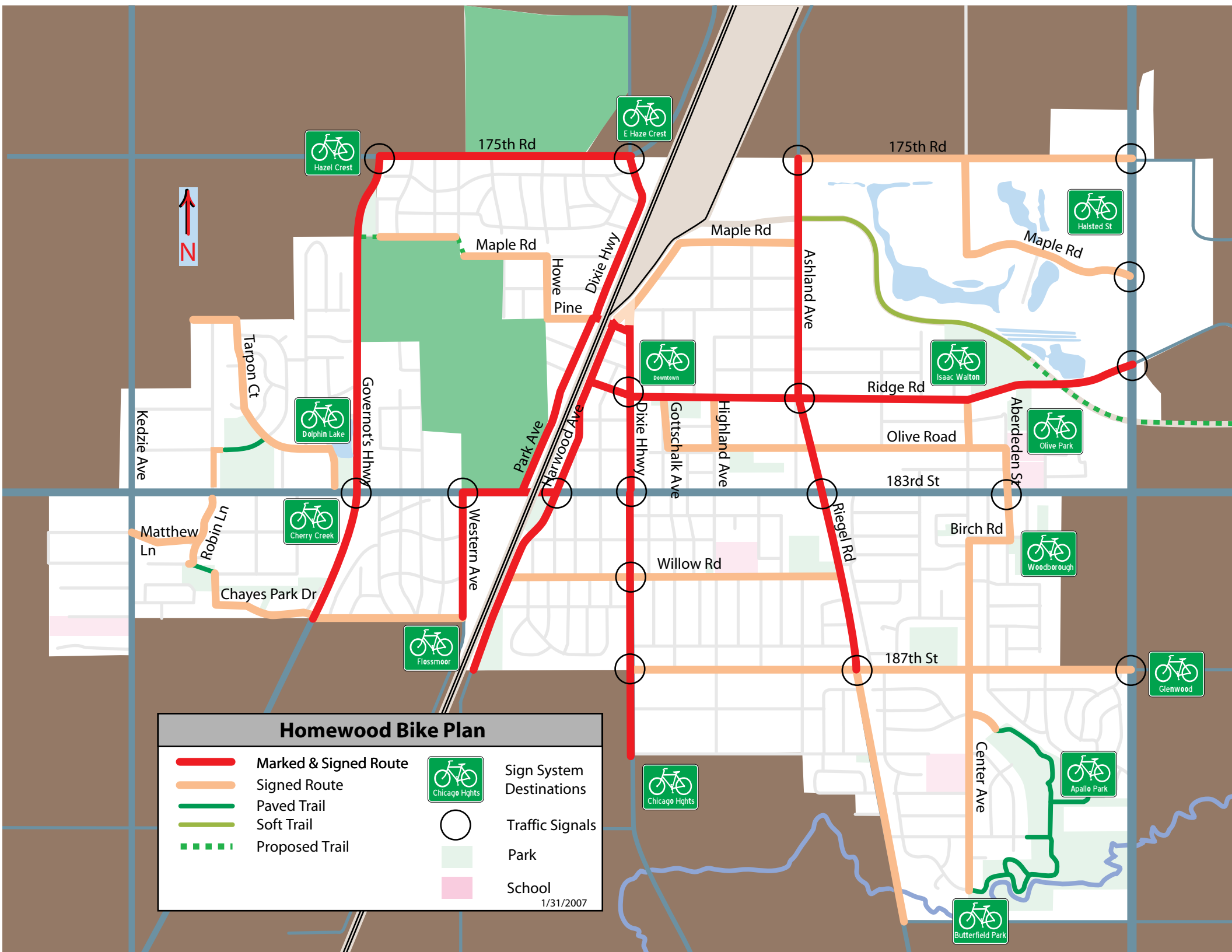
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Governor's Hhwy
Park Ave
Harwood Ave
Dixie Hhwy
Gottschalk Ave
Highland Ave
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Olive Park
Olive Road
183rd St
Matthew Ln
Robin Ln
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Riegel Rd
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1/31/2007

Introduction

On the preceding page is the proposed network of bicycle routes and facilities that forms the foundation of the Village of Homewood's Bicycle Plan.

The map of proposed bicycle routes speaks in the clearest terms to the goals of the Village of Homewood Bicycle Plan:

- Improve the safety of Homewood streets for all users and all ages
- Provide a convenient network that accommodates the range of current bicycle use in Homewood – for recreation, exercise, and transportation
- Encourage bicycling as a choice for active living and inexpensive, non-polluting, and convenient transportation
- Distinguish Homewood as a progressive community in tune with residents' and businesses' desire for more transportation choices, safer streets, and more physically active lifestyles.

To map these routes, Homewood residents shared their knowledge and experience gained from living in and cycling around Homewood at two public meetings in 2006, one in January and the second in October at the Marie Irwin Center. This network embodies their vision of Homewood as a bicycle-friendly community.

This plan also provides guidance for the facility design, bike parking, funding, and the establishment of encouragement and education programs, events, and enforcement strategies that are essential to realizing a bicycle-friendly vision. This approach recognizes that barriers to cycling are not always a problem of insufficient facilities – motorist behavior and attitudes, bicyclist skill level, and a lack of "bike culture" all discourage or prevent residents from choosing to bike.

This bike plan is a *working document*. The Village of Homewood contracted with the Chicagoland Bicycle Federation to develop this plan, and, through the Village Bicycle Plan Steering Committee, has been a partner in each step of its development. The Committee is formed of representatives from a broad selection of Village departments and agencies identified as stakeholders in the plan's development and implementation [a list of committee members current as of this writing can be found in the Executive Summary, page 1].

The Village of Homewood Bicycle Plan was accepted in January 2007 by the Bicycle Plan Steering Committee as an official planning document of the Village, with a full commitment to its implementation by the Board of Trustees. With this plan, the Village and its residents have bolstered their claim to a progressive community committed to the pursuit of a high quality of life for its diverse residents. Its implementation should engender pride within the community, and set the bar for other Southland communities pursuing the activity-based quality of life improvements their residents demand.

Near-Term Priorities

Sign the Bicycle Network

Map key [signed-only routes]:

Scope of work: Install wayfinding and bike route signs for entire network; 18 miles

Target completion: First year

Use accepted standards for bicycle route signage that identifies the bicycle network and communicates at key points destination, distance, and direction.

Homewood's bicycle network uses many low-traffic residential streets whose current characteristics require only the appropriate signage to make them suitable for most cyclists.

Homewood's primary arterials are suitable for experienced cyclists, but beyond the comfort level of most cyclists. Appropriate signage still provides useful service to those experienced riders and normalizes the presence of cyclists for the thousands of motor vehicle drivers that use the routes daily. So this plan includes signing the entire bicycle network as a near-term priority.

Mark Traffic Signal Detectors

Map key for network traffic signals:

Scope of work: 17 signalized intersections

Target for completion: First year

Place consistent markings at signalized intersections utilizing vehicle detector loops that show cyclists where to place their bike for detection by the loop.

Homewood's bicycle network incorporates key signalized intersections at high-traffic cross streets to help cyclists cross more safely, quickly and conveniently, including:

Governors Hwy. at 175th St.
Governors Hwy. at 183rd St.
Ashland Ave./Riegel Rd. at Ridge Rd.
Riegel Road at 183rd St.
187th St. at Dixie Hwy.
187th St. at Riegel Rd.
187th St. at Halsted St.
Ridge Rd. at Halsted St.
Aberdeen Rd. at 183rd St.
175th St. at Ashland Ave.
175th St. at Halsted St.
Ridge Rd. at Dixie Hwy.
Dixie Hwy. at 183rd St.
Willow Rd. at Dixie Hwy.
Maple St. at Halsted St.
Harwood Ave. at 183rd St.
Western Ave. at 183rd St.

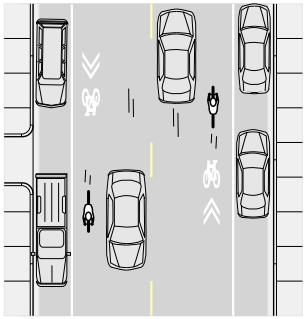
Some traffic signal loop detectors will not detect a bicyclist regardless of the position of the bicycle. These loop detectors should be adjusted within reasonable limits to detect most cyclists, and should also be a near term priority.

Shared Lanes

Map key:

Scope of work: Install shared lane markings; 3.1 miles

Target for completion: Second year



On high-traffic arterials with insufficient available width to accommodate a separated bike lane, mark the travel lane as shared space using federally accepted shared lane markings on the asphalt.

Streets and segments on the Homewood bicycle network that fit the shared lane profile include:

- Ridge Rd. [Harwood Ave. to Highland Ave. & Riegel Rd. to Center Ave.]
- Harwood Ave. [Dixie Hwy. to 183rd St.]
- Park Ave. [Dixie Hwy. to 183rd St.]
- Governor's Hwy. [175th St. to Heather Rd.]

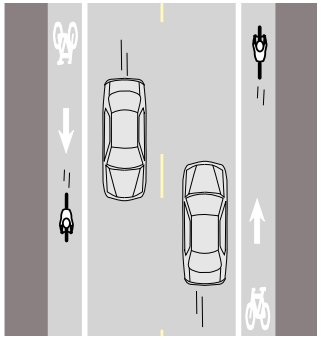
Shared lane markings help drivers to expect and accept cyclists in the street, and by helping to define a shared space guide the drivers in passing with caution and at an acceptable distance. For bicyclists, shared lane markings encourage legal behavior and raise cyclists' comfort level, helping them behave more predictably.

Bike Lanes

Map key:

Scope of work: Install dedicated bicycle lanes; 2.7 miles

Target for completion: Second year



On high-traffic arterials with sufficient available width, establish 5' lanes in each allowed direction of travel for the exclusive use of bicyclists.

Streets and segments on the Homewood bicycle network that currently can accommodate bicycle lanes include:

- Dixie Hwy. [175th St. to 183rd St.]
- Ashland Ave. [175th St. to Ridge Rd.]
- Ridge Rd. [Highland Ave. to Riegel Rd.]

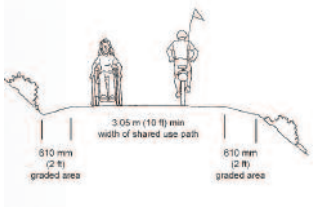
Bike lanes offer the highest level of safety for drivers and cyclists on streets with heavy traffic. They reinforce proper roadway etiquette, raise the visibility of cyclists, and help bicyclists and drivers behave predictably when sharing roadspace.

Off-Street Connections

Map key:

Scope of work: Improve/install off-street bicycle connections; .1 miles

Target for completion: Second year



Install or improve short, off-street connections where they provide a route that's more direct or improve access relative to an on-street route.

Short off-street connections in the Homewood Bicycle Network include:

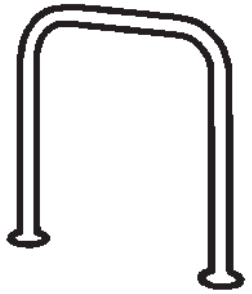
- Between Sacramento Ave. and Tarpon Ct. through Homewood Estates Park
- Between Robin Ln. & Chayes Park Dr. through Pinewood Park
- Between Western Ave. and Maple Road just north of Ravisloe Country Club.

Throughout the network and in future street construction, on-street accommodation of cycling should always have preference over off-street facilities. But where off-street routes can give priority to cyclists or improve access over on-street routing, these opportunities should be pursued.

Bicycle Parking

Scope of work: Purchase and install 100 bicycle racks

Target for completion: Second year



Install throughout the village "inverted u" parking racks at public buildings, parks, and on village-owned property near businesses and multi-unit residences.

Racks should be located within clear view of the destination's entrance way, and preferably as close as the closest motor vehicle parking space, no more than 50 feet away.

Initial bike parking installation should focus on the public agencies, schools, pools and parks, and these key retail areas:

- Downtown Homewood [Ridge Rd. & Dixie Hwy.]
- Southgate area [187th St. and Dixie Hwy.]
- 183rd St. and Western Ave.
- Cherry Creek Mall [183rd St. & Governors Hwy.]
- 183rd. St. and Kedzie Ave.
- Halsted St. businesses

Accompanying the rack installation program should be a bicycle parking ordinance that requires new construction in Homewood to include bicycle parking per the village's specifications.

Education & Events

Scope of work: Establish bicycle programming committee

Target completion: First year

Establish a bicycle programming committee composed of village staff, the local chamber of commerce, village schools and residents to explore events and education options

Bicycling events and education programs will encourage use of the network and facilities, raise the skill level and confidence of bicyclists in the village, and grow support for implementing this plan's mid-term and long-term bicycle network recommendations.

Here's a sample of programs that would work well in Homewood:

- Safe Routes to Schools - Safe Routes to School programs encourage physical activity by promoting walking and biking to school.
- Bicycle Education for Kids & Adults - Bicycle education classes that teach street skills, basic maintenance and rules of the road are popular around the region.
- Shop by Bike - Shop by Bike programs encourage village residents to shop locally by taking their bikes on short errands, adding physical activity to their day, relieving parking issues, and supporting local businesses.

Homewood Bicycle Map

Target completion: First year

Use the established bicycle network to produce a bicycling map for the Village of Homewood for free distribution to Homewood residents and businesses.

A village bicycle map encourages bicycle use by promoting the bicycle network and identifying bicycle-friendly routes to important Village destinations - swimming pools, ball fields, schools, parks, restaurants and businesses. A village bicycle map also becomes a powerful message for marketing Homewood's high quality of life to prospective homebuyers, developers and businesses.

Mid-Term Priorities [3-5 years]

Construct the Quarry Spur Trail

Map key:

Scope of work: Construct paved multi-use trail; 2 miles

Target for completion: 5 years

Develop the abandoned rail corridor connecting Izaak Walton Nature Preserve with the Thornton Quarry and Glenwood Woods Forest Preserve as a multi-use trail.

A completed Quarry Spur Trail provides the Village of Homewood with an extension of the planned Thorn Creek Trail system, providing connections to the Pennsy Greenway, the Old Plank Road Trail, and other components of the Grand Illinois Trail.

Constructing the trail requires the cooperation and coordination of multiple jurisdictions and agencies, including:

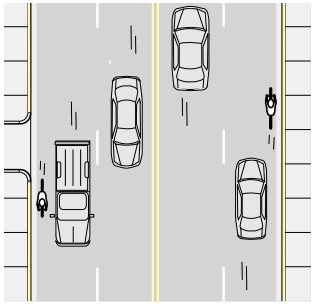
- Izaak Walton Nature Preserve
- Village of Homewood
- Village of Thornton
- Thornton Quarry
- Forest Preserve District of Cook County
- Village of Glenwood

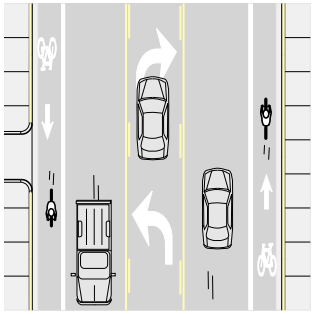
Despite the coordination required, the available right-of-way for more than half of the trail's length, the connections made, the benefits for multiple communities, and the growing appreciation and demand for trail systems makes the Quarry Spur Greenway a viable mid-term priority.

Road Diets

Scope of work: Reduce vehicle lane capacity, install dedicated turn lanes and bicycle lanes; 1.7 miles

Target for completion: 3 years





Reduce 4-lane arterials along the bicycle network with ADTs of 18,000 or less to two vehicle travel lanes, a dedicated turn lane, and two standard bicycle lanes. Roads meeting this criteria in Homewood include::

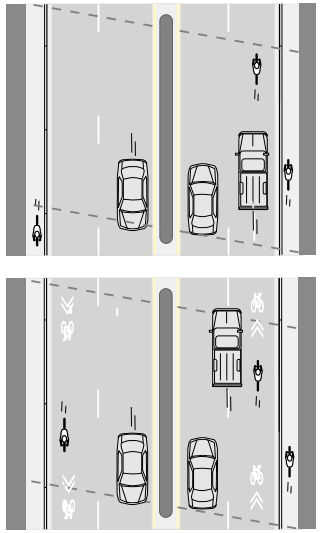
- Ridge Road [Halsted St. to Center Ave.]
- Dixie Highway [183rd St. to Idlewild Ln.]
- Riegel Road [Ridge Rd. to 183rd St.]

In addition to making space for bicyclists, road diets – when applied to 4-lane streets with a lot of turning movements like Dixie Highway south of 183rd St. – often improve traffic flow and safety by moving turning vehicles out of the travel lanes. Since typically only restriping is necessary with no additional street width, Road Diets are readily implemented in the mid-term program. Costs should be minimized by coordinating Road Diets with village resurfacing and other street maintenance programs.

183rd St. Viaduct Marking

Scope of work: Install shared lane markings and signage;1 mile

Target for completion: 3 years



Identify the outside lanes approaching and exiting the 183rd Street viaduct [between Park Ave. and Harwood Ave.] as shared lanes with appropriate pavement markings and signage.

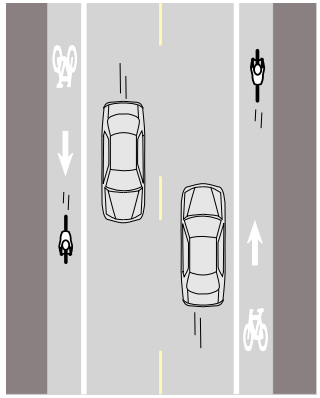
The roadway's width, the bridge structure, and the high traffic volume severely limit the solutions for bicycle accommodations short of rebuilding the viaduct. Shared lane markings would improve safety and comfort levels for the experienced cyclists currently using 183rd Street.

While sidewalks have serious shortcomings and often decrease safety and convenience as bicycle routes, the beginning and moderately experienced cyclist are highly unlikely to venture off the viaduct's sidewalks. Railings and other impediments on the sidewalks should be mitigated or removed to better accommodate these cyclists.

Improve Harwood Ave. & Riegel Rd.

Scope of work: Add width, install bicycle lanes; .8 miles

Target for completion: 5 years



Add additional pavement width to Harwood Ave. [south of 183rd St.] and Riegel Road to accommodate 5' bike lanes in each direction. For cost efficiency, this project should be coordinated with the village's reconstruction/resurfacing efforts.

Experienced cyclists use both busy routes to make important connections to communities south of Homewood, despite the roadways' busy traffic. While they should be signed as part of the bike network in the near-term, the installation of bike lanes in the mid-term would improve service levels for experienced cyclists, mitigate cyclists' impact on traffic flow, and encourage moderately experienced cyclists to use their bicycles more often.

Long-Term Priorities [Years 6-10]

183rd St. Road Diet [Kedzie Ave. - Halsted St.]

Scope of work: Reduce vehicle lane capacity, install dedicated turn lanes and bicycle lanes

Target for completion: 6 years

Reconfigure 183rd Street to two travel lanes, 5' bicycle lanes in both directions, and a dedicated center turn lane. Improve intersections to incorporate left- and right-hand-turn only lanes.

183rd St. is Homewood's primary east/west arterial. A substantial change in the roadway's configuration would be expensive and controversial. However, the roadway already provides important connections for experienced cyclists. Accommodating them wherever possible along this important roadway should be village policy..

Canadian National/Willow Rd. Tunnel

Scope of work: Construct bike/pedestrian tunnel beneath CN tracks

Target for completion: 10 years

Construct a bicycle/pedestrian tunnel beneath the Canadian National railroad tracks connecting Willow Road and Alexander Terrace. A tunnel would encourage bicycling and walking by providing a more pleasant experience for a wider range of pedestrians and bicyclists than 183rd St.. And for those beginning their trips south of 183rd St., it would provide a useful shortcut to destinations across the tracks.

Coordinating the funding for this project - likely to exceed a million dollars - and the necessary cooperation from multiple agencies make this a long-term priority for the village's bicycle plan.

Appendixes

A. Bicycle Facilities Guidance and Resources

Bicycle Lane Design Guide; City of Chicago and the Chicagoland Bicycle Federation, 2002. http://www.bicyclinginfo.org/de/bikelaneguide.cfm

Guide for the Development of Bicycle Facilities, 3rd Edition; American Association of State Highway and Transportation Officials, 1999. http://www.transportation.org

Bike Parking for Your Business; Chicagoland Bicycle Federation, 2003. http://www.catsmpo.com/bikeped/bike_parking_guide_web.pdf

Pedestrian and Bicycle Information Center, U.S. Department of Transportation. http://www.bicyclinginfo.org/

Chicagoland Bicycle Federation - 9 W Hubbard, Ste. 402, Chicago, IL 60610; 312/427-3325; http://biketraffic.org

B. Bicycle Facilities/Program Funding Sources

Congestion Mitigation and Air Quality Program [CMAQ] - An annual program administered by Chicago Metropolitan Agency for Planning that funds transportation facilities and programs that show an air quality improvement through the reduction of motor vehicle use. Requires 20% local matching funds. Program information: www.chicagoareaplanning.org/

Surface Transportation Program [STP] - STP assists municipalities with local surface transportation improvements. Administered by the South Suburban Mayors and Managers Association. Requires 30% local matching funds. Program information: http://ssmma.org/programs/transportation/stp.aspx

Illinois Transportation Enhancements Program [ITEP] - Administered by the Illinois Department of Transportation. ITEP funds bicycle and pedestrian facilities, bicycle education programs, and transportation-related beautification and restoration projects. Requires 20% local matching funds. Program information: http://www.dot.il.gov/opp/itep.html

Recreational Trails Program [RTP] - Federal funding administered by the Illinois Department of Natural Resources [IDNR] for the construction and improvement of multi-use trails and facilities. Requires 20% local matching funds. Program information: http://dnr.state.il.us/ocd/newbike2.htm

Illinois Bicycle Path Program - An annual program administered by the Illinois Department of Natural Resources to aid the construction of multi-use trails and acquire the appropriate right-of-way. Requires 50% local matching funds Program information: http://dnr.state.il.us/ocd/newrtp2.htm

Appendix C: Proposed On-Street Bicycle Facilities, Near & Mid-Term

VILLAGE OF HOMEWOOD
PROPOSED 2007 ON-STREET BICYCLE FACILITIES
2 - 1 - 2007

Street	Segment	Facility Type	Length [miles]	Comments
N – S STREETS				
Tarpon Ct.	N. village limit-Dolphin Lake	Signed Route	.5	
Robin Lane	183rd – Pinewood Park	Signed Route	.2	
Sacramento Ave.	Olive Rd. – 183rd St.	Signed Route	.1	
Sacramento Ave.	Willow Rd. – Chayes Park Rd.	Signed Route	.1	
Governor's Hwy	175th – Heather Rd.	Shared Lane	1.4	
Howe Ave.	Maple Rd. – Pine Rd.	Signed Route	.25	
Western Ave.	183rd – Heather Rd.	Signed Route	.3	
Dixie Hwy.	175th – 183rd	Striped Lane	1	
Dixie Hwy.	183rd – Idlewild Lane	Road Diet	.75	
Highland Ave.	Ridge Rd. – Olive Rd.	Signed Route	.2	
Harwood Ave.	Dixie – Ridge Rd.	Shared Lane	.2	
Harwood Ave.	Ridge – 183rd	Shared Lane	.4	
Harwood Ave.	183rd –187th	Striped Lane	.4	Requires additional width
Harwood Ave.	Maple – Vincennes	Signed Route	.06	
Park Ave.	Dixie – 183rd	Shared Lane	.5	
Riegel Rd.	Ridge – 183rd	Road Diet	.4	
Riegel Rd.	183rd – 187th	Striped Lane	.4	Requires additional width
Riegel Rd.	187th- Holbrook	Signed Route	.7	
Ashland Ave.	175th – Ridge	Striped Lane	.7	
Center Ave.	Ridge Rd. – Olive Rd.	Signed Route	.2	
Center Ave.	Birch Rd. – Butterfield Park	Signed Route	1	
Hoffman Center Way	175th – Maple	Signed Route	.3	
Aberdeen St.	Olive Rd. – Birch Rd.	Signed Route	.4	

Street	Segment	Facility Type	Length [miles]	Comments
E - W STREETS				
175th St.	Ashland - Halsted	Signed Route	1	
Maple St.	Governors Hwy [approx.] – Western	Signed Route	.2	
Maple St.	Western – Howe	Signed Route	.3	
Maple St.	Harwood - Ashland	Signed Route	.2	
Maple St.	Hoffman Way Center - Halsted	Signed Route	.2	
Ridge Rd.	Harwood -Highland	Shared Lane	.3	
	Highland - Riegel	Striped Lane	.2	
	Riegel - Center	Shared Lane	.3	
	Center – Halsted	Road Diet	.5	
Pine St.	Howe - Dixie	Signed Route	.2	
Olive Rd.	Gottschalk - Aberdeen	Signed Route	.5	
Birch Rd.	Center to Aberdeen	Signed Route	.1	
Heather Rd.	Governors Hwy – Western	Signed Route	.5	
Willow Rd.	Harwood - Riegel	Signed Route	1	
Matthew Ln.	Kedzie – Robin Ln.	Signed Route	.17	
Chayes Park Dr.	Sacramento - Governors Hwy	Signed Route	.25	
187th St.	Dixie - Halsted	Signed Route	1.5	

TOTAL MILEAGE - Signed-Only Routes	10.43
Striped Lane/Shared Markings	7.45
Total Network	**17.88**

Appendix D: Proposed Traffic Signal Detector Markings

VILLAGE OF HOMEWOOD
PROPOSED 2007 THERMOPLASTIC TRAFFIC SIGNAL LANE POSITIONING MARKERS
2 – 1 – 2007

Intersection	No. Lanes	No. Markers	Comments
175th St. @ Governors Hwy	3 E/3 W	1	[left turn lanes only]
Governors Hwy @ 175th St	2 N	2	
175th St. @ Dixie Hwy	6 E/6 W	4	
Dixie Hwy @ 175th St	6 N/6 S	2	[left turn lanes only]
175th St @ Ashland Ave	2 W	2	
175th St. @ Halsted	4 E/4 W	2	[through lanes only]
Maple St. @ Halsted	4 E	2	[through lanes only]
Ridge Rd @ Dixie Hwy	2 E/1 W	3	
Dixie Hwy @ Ridge Rd.	2 S/2 N	2	[left turn lanes only]
Ridge Rd @ Ashland/Riegel Rd	2 E/2 W	2	[left turn lanes only]
Ashland/Riegel Rd @ Ridge Rd	2 S/2N	4	
Ridge Rd @ Halsted St	3 E/3 W	2	[through lanes only]
Governors Hwy @ 183rd St.	3 S/3 N	4	
183rd St @ Governors Hwy	3 E/3 W	2	[left turn lanes only]
Western Ave @ 183rd St	2 N/1 S	2	
183rd St @ Western Ave	2 E/3 W	1	[left turn lanes only]
Riegel Rd @ 183rd St	3 S/3 N	4	
183rd St @ Riegel Rd	3 E/3 W	2	[left turn lanes only]
Willow Rd @ Dixie Hwy	1 E/1 W	2	
187TH St @ Dixie Hwy	1 W	2	
187th St @ Riegel Rd	1 E/1 W	2	
187th St @ Halsted St	2 E/2 W	2	[through lanes only]
183rd St @ Harwood	3 E/3 W	2	[left turn lanes only]
Harwood @ 183rd St	3 S/2 N	5	
Aberdeen @ 183rd St	1 S/1 N	2	
	TOTAL	**60**	

Village of Homewood Proposed Bicycle Network:
County & State Jurisdiction
4/19/07

Road	Agency	Segment
Holbrook	Cook Co	
Ashland	Cook Co	
Halsted	IDOT	
Ridge	IDOT	
Riegel	IDOT	
Dixie	IDOT	
Harwood	IDOT	Dixie Hwy -183rd St
Governor's Hwy.	IDOT	
175th St	IDOT	Governor's Hwy - Dixie Hwy

All unlisted streets and segments fall under local jurisdiction.

Appendix F: Estimated Costs - Near-Term Priorities

Estimated Costs - 3/6/2007

Striped Lanes/Shared Markings

1. Construction

	QTY	UNIT	UNIT PRICE	TOTAL
Striping - Thermoplastic Pavement Marking – 6” [bike lanes, both directions]	28,512	Linear Feet	$1.20	$34,214
Striping - Thermoplastic Pavement Marking – 4” [bike lanes, both directions]	28,512	Linear Feet	$0.69	$19,673
Pavement Symbols – 6’ Pre-Cut Plastic Bicycle/Arrow [shared lanes & bike lanes, 5.8 miles total, both directions]	204	Bike/Arrow set	$200	$40,832
Signing	5.8	Mile	1600	$9,280

2. Engineering

	TOTAL
Design Engineering [7% of Construction costs]	$7,280
Construction Engineering [5% of Construction costs]	$5,200
TOTAL	**$116,480**

Estimated Costs - 3/6/2007

Signed Routes

1. Construction

	QTY	UNIT	UNIT PRICE	TOTAL
Bicycle Network Signing [Signed-Only Routes]	10.43	Mile	$1,600.00	$16,688

2. Engineering

	TOTAL
Design Engineering [7% of Construction costs]	$1,168
Construction Engineering [5% of Construction costs]	$834
TOTAL	**$18,691**

Estimated Costs - 3/6/2007

Traffic Signal Lane Positioning Markers

1. Construction

	QTY	UNIT	UNIT PRICE	TOTAL
Plastic pre-cut lane position markings				
	60	Per pre-cut symbol	$200	$12,000

2. Engineering

Design Engineering [7% of Construction costs]	TOTAL	$840
Construction Engineering [5% of Construction costs]		$600
	TOTAL	**$13,440**

Estimated Costs - 3/6/2007

Bicycle Racks

1. Construction

	QTY	UNIT	UNIT PRICE	TOTAL
Inverted U, 2-bike capacity	100	Per rack	$200	$20,000

2. Engineering

	TOTAL
Design Engineering [7% of Construction costs]	$1,400
Construction Engineering [5% of Construction costs]	$1,000
TOTAL	**$22,400**

Estimated Costs - 3/6/2007

Homewood Bicycle Map

Design and production of map/marketing piece to guide route choice and promote cycling and the high quality of life available in Homewood

$8,000

PROJECT TOTAL **$171,010**

Estimated costs as of 3/22/07

Quarry Spurr Trail

	QTY	UNIT	UNIT PRICE	TOTAL
	1.7	Mile	$300,000	$510,000
Engineering				
Design Engineering [7% of Construction costs]			$35,700	
Construction Engineering [5% of Construction costs]			$25,500	
		TOTAL	**$571,200**	

Estimated costs as of 3/22/07

Road Diet, Riegel Road, Ridge to 183rd St.

	QTY	UNIT	UNIT PRICE	TOTAL
Striping Thermoplastic Pavement Marking – 6” [bike lanes, both directions]	4304	Linear Feet	$1.20	$5,165
Pavement Symbols – 6’ Pre-Cut Plastic Bicycle/Arrow	14	Bike/Arrow set	$200	$2,869
Signing	0.3	Mile	$1,600	$480

Engineering

	TOTAL
Design Engineering [7% of Construction costs]	$596
Construction Engineering [5% of Construction costs]	$426
TOTAL	**$9,536**

Estimated costs as of 3/22/07

Improve Harwood & Riegel - add width for lanes

	QTY	UNIT	UNIT PRICE	TOTAL
5' additional pavement width, both directions, striped as bike lanes	1.6	Mile	$350,000.00	$560,000
Signing	0.8	Mile	$1,600	$1,280

Engineering

	TOTAL
Design Engineering [7% of Construction costs]	$39,290
Construction Engineering [5% of Construction costs]	$28,064
TOTAL	**$628,634**

Note: Cost of road widening drops significantly when coordinated with larger road improvement project.

Estimated costs as of 3/22/07

Road Diet, Ridge Road - Center to Halsted

	QTY	UNIT	UNIT PRICE	TOTAL
Striping - Thermoplastic Pavement Marking, 6” [bike lanes, both directions]	5280	Linear Feet	$1.20	$6,336
Pavement Symbols – 6’ Pre-Cut Plastic Bicycle/Arrow [both directions]	18	Bike/Arrow set per 300 feet	$200	$3,520
Signing	0.5	Mile	$1,600	$800

Engineering

	TOTAL
Design Engineering [7% of Construction costs]	$746
Construction Engineering [5% of Construction costs]	$533
TOTAL	**$11,935**

Estimated costs as of 3/22/07

Road Diet, Dixie Hwy - 183rd to Idlewild

	QTY	UNIT	UNIT PRICE	TOTAL
Striping - Thermoplastic Pavement Marking – 6” [bike lanes, both directions]	8448	Linear Feet	$1.20	$10,138
Pavement Symbols – 6’ Pre-Cut Plastic Bicycle/Arrow	28	Bike/Arrow set per 300 feet	$200	$5,632
Signing	0.8	Mile	$1,600	$1,280

Engineering

	TOTAL
Design Engineering [7% of Construction costs]	$1,193
Construction Engineering [5% of Construction costs]	$852
TOTAL	**$19,096**

Estimated costs as of 3/22/07

183rd St. Viaduct Street Improvement

	QTY	UNIT	UNIT PRICE	TOTAL
Pavement Symbols – 6' Pre-Cut Plastic Bicycle/Arrow	6	Bike/Arrow set	$200	$1,200
Signing	0.3	Mile	$1,600	$480

Engineering

	TOTAL
Design Engineering [7% of Construction costs]	$118
Construction Engineering [5% of Construction costs]	$84
TOTAL	**$1,882**

PROJECT TOTAL $1,242,281

Appendix G - Cost Estimates, Long-Term Program

Estimated costs as of 3/22/07

Road Diet - 183rd St., Kedzie to Halsted

	QTY	UNIT	UNIT PRICE	TOTAL
Striping Thermoplastic Pavement Marking – 6”	31,680	Linear Feet	$1.20	$38,016
Pavement Symbols – 6’ Pre-Cut Plastic Bicycle/Arrow	106	Bike/Arrow set	$200	$21,120
Signing	3	Mile	$1,600	$4,800

Engineering

Design Engineering [7% of Construction costs]	$4,476
Construction Engineering [5% of Construction costs]	$3,197
TOTAL	**$71,608**

Estimated costs as of 3/22/07

Canadian National Tunnel

	QTY	UNIT	UNIT PRICE	TOTAL
Bike/Ped Tunnel	100	Linear Feet	$40,000	$4,000,000
Signing	0.03	Mile	$1,600	$48

Engineering

Design Engineering [7% of Construction costs]	$280,003
Construction Engineering [5% of Construction costs]	$200,002
TOTAL	**$4,480,054**
PROJECT TOTAL	**$4,551,662**